F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD			

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL WITH STREET LIGHTING AT MD 3 AND WAUGH CHAPEL ROAD IN ANNE ARUNDEL COUNTY. MD 3 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATION WILL REMAIN THE SAME.

THIS INTERSECTION IS CURRENTLY HARDWIRE INTERCONNECTED TO THE INTERSECTION OF MD 3 AND JOHNS HOPKINS ROAD AND FIREHOUSE PREEMPTION EXISTS. THE EXISTING WIRING WILL BE UTILIZED.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH TEN (10) TWO-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, AND INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER AT (410)787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

EQUIPMENT LIST "C"

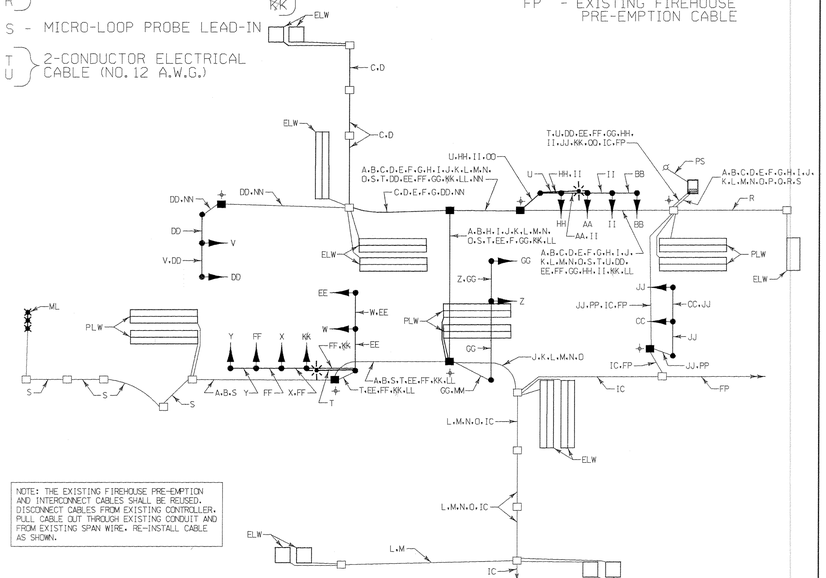
C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7941 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

QUANTITY	DESCRIPTION
7	12" X 30' STEEL STRAIN POLE
1	BASE MOUNTED CABINET AND CONTROLLER

ALL EQUIPMENT TO BE REMOVED AND NOT LISTED ABOVE SHALL BECOME THE PROPERTY OF THE CONTRACTOR

WIRING DIAGRAM

LEGEND

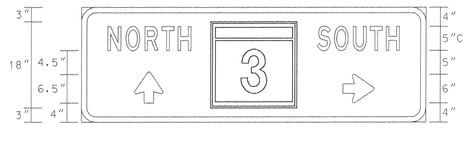


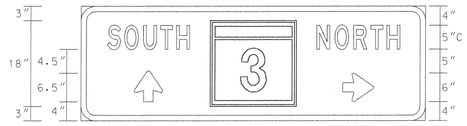
EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

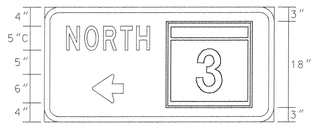
ITEM NO.	QUANTITY	DESCRIPTION
9001	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH TEN (10) TWO-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.
9002	12 4 EACH	12 IN., ONE-WAY, THREE-SECTION (R,Y,G) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING AND TUNNEL VISORS.
9003	4 EACH	12 IN., ONE-WAY, THREE-SECTION (RA,YA,GA) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING AND TUNNEL VISORS.
9004	7 EACH	12 IN., ONE-WAY, THREE-SECTION (R,Y,G) OPTICALLY PROGRAMMED TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING AND TUNNEL VISORS.
9005	1 EACH	12 IN., ONE-WAY, FIVE-SECTION (R,Y,YA,G,GA) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING AND TUNNEL VISORS.
9006	89 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 2 EACH D3-2 SIGN (VARIABLE X 16 IN.) MAST ARM MOUNT - 1 EACH "MD 3, NORTH, SOUTH" SIGN (72 IN. X 24 IN.) MAST ARM MOUNT - 1 EACH "MD 3, SOUTH, NORTH" SIGN (72 IN. X 24 IN.) MAST ARM MOUNT - 1 EACH "MD 3, NORTH" SIGN (48 IN. X 24 IN.) MAST ARM MOUNT - 1 EACH "MD 3, SOUTH" SIGN (48 IN. X 24 IN.) MAST ARM MOUNT - 1 EACH R10-12 SIGN (36 IN. X 42 IN.) MAST ARM MOUNT - 2 EACH R3-5L SIGN (30 IN. X 36 IN.) MAST ARM MOUNT
9007	1 EACH	MICRO-LOOP PROBE SET WITH 1000 FT. LEAD-IN.

SIGN LAYOUT





WIDTH	HEIGHT	COLOR LEG.	COLOR BKGD	BORDER WIDTH	BORDER RADIUS	ARROW	SHIELD
6'-0"	2'-0"	W	G	¾"	2"	6"	MI-6A



WIDTH	HEIGHT	COLOR LEG.	COLOR BKGD	BORDER WIDTH	BORDER RADIUS	ARROW	SHIELD
4'-0"	2'-0"	W	G	¾"	2"	6"	MI-6A

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2001	6 C.Y.	TEST PIT EXCAVATION
5005	260 L.F.	24 IN. WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE
8001	23 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
		FURNISH AND INSTALL MAST ARM POLE AND ARM
8097	1 EACH	- 21 FT. POLE WITH 38 FT. ARM
8098	1 EACH	- 21 FT. POLE WITH 50 FT. ARM
8100	1 EACH	- 21 FT. POLE WITH 70 FT. ARM
8105	1 EACH	- 27 FT. POLE WITH 70 FT. ARM
8101	1 EACH	- 27 FT. POLE WITH TWIN 50/50 FT. ARMS
8011	16 EACH	INSTALL SIGNAL HEAD
8015	1 EACH	INSTALL MICRO-LOOP PROBE SET
8019	1 EACH	INSTALL CONTROLLER AND CABINET-BASE MOUNT
8022	700 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8024	100 L.F.	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8025	90 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 40 RIGID PVC CONDUIT-TRENCHED
8026	150 L.F.	FURNISH AND INSTALL 2 IN. SCHEDLE 80 RIGID PVC CONDUIT-SLOTTED
8031	275 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 40 RIGID PVC CONDUIT-TRENCHED
8032	190 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
8033	90 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT-BORED
8035	6 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8075	1 EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
8037	6 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH
8043	2,050 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8044	7,650 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR ALUMINUM SHIELDED (NO. 14 A.W.G.)
8047	175 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE-5 CONDUCTOR (NO. 14 A.W.G.)
8048	2,650 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE-7 CONDUCTOR (NO. 14 A.W.G.)
8049	625 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR (NO. 12 A.W.G.)
8052	630 L.F.	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
8053	60 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE-1 CONDUCTOR (NO. 4 A.W.G. - THHN/THWN)
8057	89 S.F.	INSTALL OVERHEAD SIGN
8059	2 EACH	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
8060	2 EACH	FURNISH AND INSTALL 20 FT. LIGHTING BRACKET FOR TRAFFIC SIGNAL STRUCTURE
8061	8 EACH	REMOVAL OF EXISTING FOUNDATION
8062	LUMP SUM	REMOVAL OF EXISTING EQUIPMENT
8063	LUMP SUM	DELIVERY OF REMOVED EQUIPMENT
8064	LUMP SUM	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
8067	1 EACH	USE EXISTING DISK AND AS-BUILT TRAFFIC CONTROL DEVICES
NEG.	400 L.F.	REMOVE AND RE-INSTALL EXISTING CABLE

REVISIONS	APPROVALS	REVISIONS
	CHIEF, SIGNAL DESIGN SECTION	
	ASST. DISTRICT ENGINEER, TRAFFIC	
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY	

WR&A
Whitman, Requardt and Associates
Engineers and Planners
2315 Saint Paul Street
Baltimore, Maryland 21218
(410) 235-3450

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 3 AND WAUGH CHAPEL ROAD

DATE: 12-4-95	DRAWN BY: S. BLOSS	F.A.P. NO. ~~STPG-0005(302)E~~ AW-793-385	PLAN SHEET NO.:	SHEET NO. ____ OF ____
SCALE: NONE	DESIGNED BY: T. ZAYDEL	S.H.A. NO.		
APPROVED BY: ~~[illegible]~~	CHECKED BY: T. HANNAN	COUNTY ANNE ARUNDEL	T5-1515H GI	